

REMARKS

In the Official Action dated June 28, 2006, claims 40-43, 49, and 54 were objected to for containing minor typographical errors. Corrections of these claims are submitted above. Applicants thank the Examiner for pointing out the informalities.

Claims 38, 40-49, and 54-58 were rejected as obvious under 35 USC § 103(a). In particular, claims 38 and 44 were rejected as allegedly obvious over U.S. Pat. No. 5,634,123 (“Bennion”). Claims 40-43 were rejected as allegedly obvious over Bennion in view of U.S. Publication. No. 2004/0220946 (“Krishnaprasad”) and further in view of U.S. Pat. No. 6,012,067 (“Sarkar”). Claims 45-48 and 55-57 were rejected as allegedly obvious over Bennion in view of U.S. Pat. No. 6,904,454 B2 (“Stickler”). Claims 49 and 54 were rejected as allegedly obvious over Bennion in view of Krishnaprasad and further in view of Sarkar and Stickler. Claim 58 was rejected as allegedly obvious over Bennion in view of U.S. Pat. No. 6,631,130 (“Roy”).

Rejection of Claims 38 and 44

Claim 38 is amended to more clearly define over Bennion. The claim as amended requires “a single binary fragment associated with said object that comprises both a binary fragment header and a binary fragment payload.”

Thus, while multiple binary fragments may be associated with an object, just one comprises both header and payload. Subsequent limitations of claim 38 state that the payload comprises a plurality of primitive data members in storage engine record format, and that “said plurality of primitive data members are all of the primitive data members of the object.” Thus, in combination, these limitations require just one binary fragment associated with an object that has all of the primitive data members for that object. Furthermore, such a binary object must be accompanied by “at least one additional fragment comprising at least one non-primitive member of the object.”

While the combination of all of the records in Bennion’s COMPANY object may contain all primitive data members for that object, as asserted in the Official Action (page 4), Bennion does not disclose or suggest placing all primitive data members for the object into a single binary fragment. In contrast, Bennion provides “container records” and “data

containing records,” where container records contain other records, and data containing records contain data. It appears that the primitive members of Bennion’s COMPANY object are distributed throughout Bennion’s various data-containing records.

Claim 44 depends from claim 38 and is considered allowable for the same reason.

Rejection of Claims 40-43

Claims 40-43 also depend from claim 38, and Applicants believe they are allowable for the same reason. Krishnaprasad and Sarkar were cited for aspects specific to claims 40-43. Because underlying claim 38 is considered allowable, we do not address the remarks in the Official Action regarding Krishnaprasad and Sarkar, except to note that these references were reviewed and found similarly deficient with regard to claim 38.

Rejection of Claims 45-48 and 55-57

Claims 45-48 also depend from claim 38, and Applicants believe they are allowable for the same reason. Applicants have reviewed Stickler and found it similarly deficient with regard to independent claim 38.

Claims 55-57 were rejected over Bennion in view of Stickler. These rejections are respectfully traversed.

Bennion falls short of disclosing a variety of elements in the claim. For example, the claim requires a collection start fragment comprising a collection start header, and the header has a type field that indicates the collection start fragment is a collection start fragment. Likewise, the collection element fragment has a type field that indicates the collection element fragment is a collection element fragment. Thus, the collection start header must have some data that indicates, “I am at the start of a collection.” The collection element fragment must have some data that indicates, “I am an element of a collection.”

The Official Action cites Bennion’s data-containing records and container records, with a code point at the beginning of each record, as a disclosure of the collection start and collection element fragments. Official Action page 8, third paragraph states that Bennion’s container records are equivalent to “collection.” However, container records are defined as records that contain other records. Bennion col 3, line 47. As illustrated in Bennion’s Fig. 7, a container record 701 may contain just one other record 702. Thus, there is no requirement

that a container such as 701 identify itself as containing a collection of other records. In fact, this would be counterfactual since Bennion's container 701 contains just one other record. Similarly, Bennion does not require that a record such as 702 identify itself as an element of a collection. Again, to do so would be counterfactual since 702 is the only container in 701. Thus, in Bennion, some records identify themselves as containing other records, or containing data, but no records identify themselves as starting a collection or as a member of a collection.

Furthermore, the Official Action observes that Bennion does not disclose a bit field that indicates whether an order exists among a plurality of collection element fragments. However, it states that metadata providing position within a sequential relationship in a content repository as in Stickler is analogous to such a bit field.

Stickler is directed to a "content repository system" as can be seen from the title and col. 1, line 50. Stickler is directed to a content repository for files and documents and multiple versions thereof, without regard to how such files or documents are serialized. See Stickler summary at col. 1, lines 49-67. In particular, lines 60-62 state that "metadata of at least one entity corresponds to an indication of an editorial sequence or release comprising those entities within its scope..." Stickler is not concerned with object serialization for hardware retrieval, and therefore Applicants find the application of Stickler to the context of the serialization performed by the invention to be inappropriate. Metadata that gives an editorial sequence of documents, e.g. "letter v1, letter v2, letter v3..." cannot be viewed as analogous to a bit field that flags whether data is ordered or unordered by, for example, flipping a single bit.

Rejection of Claims 49 and 54

Applicants respectfully traverse the rejection of claims 49 and 54. As explained above under Applicants response to the rejection of claims 45-48 and 55-57, Bennion falls short of disclosing a collection start fragment comprising a collection start header, and the header has a type field that indicates the collection start fragment is a collection start fragment, as required by claim 49. The collection start header must have some data that indicates, "I am at the start of a collection."

The Official Action cites Bennion's data-containing records and container records, with a code point at the beginning of each record, as a disclosure of the collection start fragment. Official Action page 8, third paragraph states that Bennion's container records are equivalent to "collection." However, container records are defined as records that *contain* other records while no records are disclosed that identify themselves as *starting a collection* (note that starting is different from containing, while the concept of a collection is entirely absent from Bennion). Please refer to Applicants discussion above, regarding claims 55-57.

Claim 54 depends from claim 49 and is considered allowable for the same reasons.

Rejection of Claim 58

Claim 58 was rejected as allegedly obvious over Bennion in view of U.S. Pat. No. 6,631,130 ("Roy"). Claim 58 is amended to more clearly define over Bennion. The claim as amended requires "a single binary fragment associated with said object that comprises both a binary fragment header and a binary fragment payload." Please refer to the discussion of claims 38 and 44, above, for an explanation of why this limitation defines over Bennion. Applicants note that Roy fails to cure the deficiency of Bennion in this regard.

Conclusion

Applicants submit that the claims as amended are in condition for allowance. We await the Examiner's determination. Should there be any questions regarding this matter that can be easily addressed by telephone, Applicants representative, Nathaniel Ari Long, can be reached at 206-332-1385.

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